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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/735,773 | 12/16/2003 | Kazuo Hiraguchi | Q78930 | 4055 |

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EXAMINER

RIVERA, WILLIAM ARAUZ

ART UNIT PAPER NUMBER

3654

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/735,773

Applicant(s)

HIRAGUCHI, KAZUO

Examiner

William A Rivera

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/16/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10-12 and 14-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato et al (Japanese Patent No. 2002-197833)/admitted prior art.

With respect to Claims 10-12 and 14-20, Sato et al, Figures 1-9, teach a tape cartridge which is insertable at a tape drive which includes a rotating member and carries out at least one of reading and writing of data, the tape cartridge comprising: a reel 3 inside the tape cartridge, the rotating member of the tape drive being engageable with the reel at a time of insertion of the tape cartridge, for transmitting rotary driving force to the reel; a brake member BM which is reciprocally movable between a locking position for prohibiting rotation of the reel and an unlocking position for enabling rotation of the reel; and an abutting portion provided at the brake member, the abutting portion being fabricated of metal and including an abutting surface which is capable of abutting against the rotating member for moving the brake member to the unlocking position at the time of insertion of the tape cartridge; the abutting surface 6 comprises a flat surface; the abutting surface 4 comprises a protruding surface; an urging member 5; the release pad is linearly movable in a direction of an axis of rotation of the reel; the brake member is movable between the locking position and the unlocking position in conjunction with the linear movement of the release pad; a case 11,12 which rotatably accommodates the reel; a reel gear

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17a; an aperture 12a is formed in the case, the reel gear 17a is exposed through the aperture to outside the case; the reel gear and the release pad are respectively engageable, through the aperture, with the rotating member of the tape drive.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al (Japanese Patent No. 2002-197833)/admitted prior art.

With respect to Claims 1-10, Sato et al, Figures 1-9, teach a tape cartridge which is insertable at a tape drive which includes a rotating member and carries out at least one of reading and writing of data, the tape cartridge comprising a reel 3 inside the tape cartridge, the rotating member of the tape drive being engageable with the reel at a time of insertion of the tape cartridge; a brake member 4 which is reciprocally movable between a locking position for prohibiting rotation of the reel and an unlocking position for enabling rotation of the reel; and a release pad 6 which is capable of engaging with the rotating member and abutting against the brake member for moving the brake member to the unlocking position, wherein one of mutually abutting portions of the brake member and the release pad includes a metallic surface which in which includes one of a flat surface form and a spherical form with and the other of the mutually abutting portions includes a resin surface which includes one of a flat surface and a curvedly recessed surface form; an urging member 5; the release pad is linearly movable in a direction of

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an axis of rotation of the reel; the brake member is movable between the locking position and the unlocking position in conjunction with the linear movement of the release pad; a case 11,12 which rotatably accommodates the reel; a reel gear 17a; an aperture 12a is formed in the case, the reel gear 17a is exposed through the aperture to outside the case; the reel gear and the release pad are respectively engageable, through the aperture, with the rotating member of the tape drive.

Japanese '833/admitted prior art teach all the elements of the tape cartridge except for the spherical radius being at least 3mm/14mm. However, it would have been an obvious to one of ordinary skill in the art, as determined through routine experimentation and optimization, to dimension the spherical surface of Japanese '833/admitted prior art as specified in Claim 1, line 13 and Claim 2, line 2 because one of ordinary skill would have been expected to have routinely experimented to determine the optimum dimensions for a particular use. It would have further been obvious to one of ordinary skill in the art to provide an increased spherical radius because such would provide a more stable rotation of the mutually abutting portions.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al (Japanese Patent No. 2002-197833)/admitted prior art as applied to claims 10-12 and 14-20 above.

Japanese '833/admitted prior art teach all the elements of the tape cartridge except for the spherical radius being at least 3mm. However, it would have been an obvious to one of ordinary skill in the art, as determined through routine experimentation and optimization, to dimension the spherical surface of Japanese '833/admitted prior art as specified in Claim 1, line 13 and Claim 2, line 2 because one of ordinary skill would have been expected to have routinely experimented to determine the optimum dimensions for a particular use. It would have further been obvious to

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one of ordinary skill in the art to provide an increased spherical radius because such would provide a more stable rotation of the mutually abutting portions.

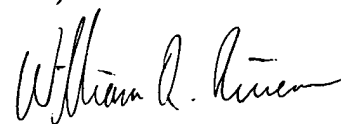
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William A Rivera whose telephone number is 703-308-2684. The examiner can normally be reached on Monday to Friday - 7:30 to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on 703-308-2688. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**WILLIAM A. RIVERA
PRIMARY EXAMINER**

December 8, 2004